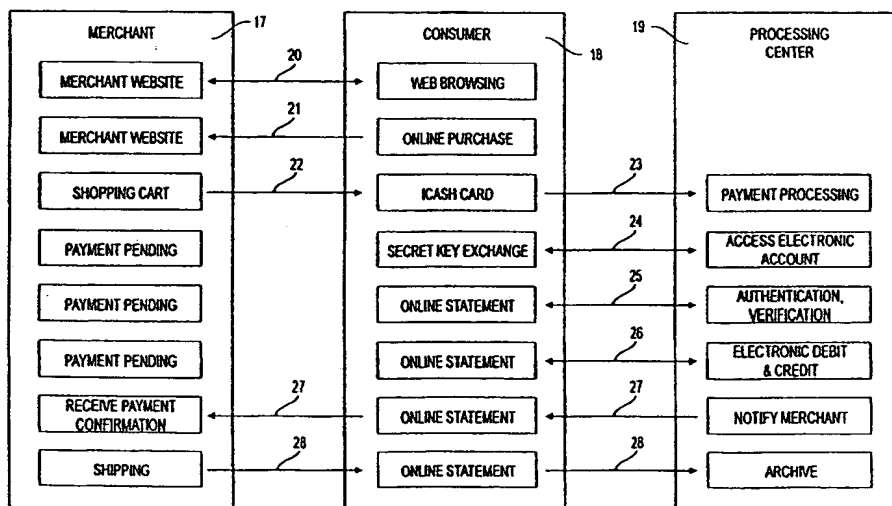




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G06F 17/60		A1	(11) International Publication Number: WO 00/57330
			(43) International Publication Date: 28 September 2000 (28.09.00)
(21) International Application Number: PCT/US00/07420 (22) International Filing Date: 20 March 2000 (20.03.00) (30) Priority Data: 09/272,120 19 March 1999 (19.03.99) US (71) Applicant: PACIFICA GROUP INC. [-/US]; 1188 Bishop Street, Suite 3512, Honolulu, HI 96813 (US). (72) Inventors: BRADEN, Wythe; 211 Luika Place, Kailua, HI 96734 (US). HSIEH, Patrick; 7122 Hawaii Kai Drive, #82, Honolulu, HI 96825 (US). (74) Agent: LIEB, Stephen, J.; Orrick, Herrington & Sutcliffe LLP, 666 Fifth Avenue, New York, NY 10103 (US).		(81) Designated States: European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	

(54) Title: FINANCIAL PAYMENT METHOD AND MEDIUM



(57) Abstract

A financial payment method and medium permitting the tender and receipt of monetary value by sellers and buyers over a network of inter-linked computers, particularly over the Internet. In a preferred embodiment, the system carries out a purchase transaction between a seller (Merchant)(17), a buyer (Consumer)(18), a remote gateway computer, with all the computers collectively linked to a Processing Center (19). The Buyer (18) selects a product for purchase (21) by browsing a seller Web site (17). The selection of the payment method redirects the buyer (18) to the Processing Center (19) over communications link (23). The buyer (18) is prompted by the Processing Center (19) to provide account information. Upon authentication of the account information (25), the buyer's electronic account outstanding balance is debited and the seller's electronic account outstanding balance is credited by the amount of the monetary value of the charger (26).

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APPLICATION FOR UNITED STATES LETTERS PATENT**FOR: FINANCIAL PAYMENT METHOD AND MEDIUM**

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Field of the Invention

The present invention is directed to a medium and a method for making financial payments, more particularly to payments via electronic transactions such as on-line Internet purchases.

10 Background of the Invention

Consumer purchases online from merchants seeking to sell goods and services is increasing significantly with the growth of Internet commerce. Because the Internet is essentially comprised of an open network of computers inter-linked by a standard communication protocol, it opens up the possibility of processing financial transactions
15 between buyer and seller at very low cost.

Two factors, however, continue to constrain the realization of the full potential of Internet consumer commerce. One factor is that the credit card (which as used herein includes credit cards, charge cards and similar financial instruments) constitutes the only payment medium which can be readily used for online purchases among the many payment

media broadly used by consumer's in physical world purchases today - the other payment media being cash, check and various quasi-cash payment media, (e.g., debit cards). Whereas cash and checks account for about three-quarters of consumer purchases in the physical world, they are not media which can be readily used for online purchases.

5 Consumers typically make decisions based on well-entrenched habits regarding the choice of payment medium to use in each purchase transaction from among all of the media available to them - cash, check, credit card, ATM card, certified check, money order, travelers check, to name just a few. These decisions are based on the interplay of numerous factors unique to the individual consumer, as well as unique to the buy-sell transaction. Such
10 factors include control, need for documentation, security, risk, convenience, cost, float, seller acceptance, and the like. These factors drive consumer choices regarding payment media, and underpin the empirically evident preference on the part of consumers for the use of checks and cash over credit cards. Whereas three-quarters of U.S. households contain a member possessing at least one credit card, credit cards are used in point-of-sale consumer
15 purchases in only about one-quarter of the cases.

In addition, there are large segments of potential online consumers who are not able to make online purchase because they do not own or cannot get credit cards. Such potential online consumers include students, the one-quarter of U.S. households without credit cards, and foreign consumers (where credit card use considerably lags the U.S.). At present, such
20 consumers must resort to off-line means of paying for goods and services being sold on the Internet. Such methods primarily comprise sending a check or money order in the mail. It is

clear from the foregoing that there is a need for an online payment medium for consumers who do not possess, or do not have ready access to, credit cards.

Finally, the credit card is a payment method which requires the transmission of the account number, expiration date, and, in many instances, the billing address of the credit card account holder. There continues to be consumer unease and hesitancy regarding the transmission of such confidential information over the open Internet network. While various encryption methods - some already implemented by certain online merchants (for example, SSL or the secure socket layer session) and some planned to be broadly implemented in the future (for example, SET, which is the method announced by the credit card associations) - are likely to lessen consumer concerns regarding online credit card security, the reality is that many consumers in the U.S. and abroad are wary of using the credit card for online purchases.

The second factor is that the cost of accepting payments online for sellers of goods and services is very high. This is for at least two reasons. The first reason is that merchants selling goods and services in the physical world are generally paid with a combination of cash, check, credit card and other payment media. The direct cost of each such payment medium ranges from near zero for cash to 2% or more of the transaction value for credit cards. Assuming a payment media mix of three-quarters cash and check and one-quarter credit card, the weighted average direct cost of payment acceptance is about 1% for a "bricks and mortar" merchant (i.e., a physical store). Because credit cards are the only feasible means of accepting online payments from consumers for most online merchants, the cost of payment acceptance on the Internet is thus 2% or more.

The second reason is that banks and other financial institutions which process online credit cards charge a premium (e.g., 0.50%) for online credit card processing. This is because online credit card transactions currently are classified as MOTO (mail order/telephone order). In this regard, in online credit card processing, the credit card magnetic stripe cannot be captured by a magnetic card reader. Furthermore, customer signatures cannot be obtained. This results in higher incidences of customer repudiation, the direct processing cost of which is passed on to the merchant by the credit card associations in the form of the above MOTO premium.

The combination of the above two factors result in direct costs associated with payment acceptance on the Internet which are higher by 300% or more than similar costs for the same merchant in physical world sales.

Objects, Summary and Statement of the Invention

It is, therefore, an object of the invention to provide an online payment medium which provides the consumer with the attributes of cash and check taken for granted in the physical world.

It is another object of the invention to provide Internet merchants with a cheaper payment medium and method alternative to credit cards for the acceptance of on-line payments.

It also is an object of the invention to provide a financial payment medium and method that provides at least the same level of authenticity, if not greater, than is available with an on-line credit card purchase.

The present invention broadly contemplates a new financial payment method and
5 medium permitting the tender and receipt of monetary amount (also called monetary value) by sellers and buyers on the Internet. A consumer who desires to make a payment on the Internet but who does not have access to a credit card or, for other reasons, does not wish to use a credit card in making an online payment is able to purchase a prepaid financial instrument, typically but not necessarily an electronic card containing information stored in a
10 memory device, such as a magnetic medium, an optical medium, a hologram, a two dimensional bar code (including matrix codes) or a semiconductor memory, which has associated therewith the prepaid monetary value stored in an online electronic account. The information is preferably stored in an encoded form and includes data unique to the given financial instrument.

15 In a preferred embodiment, the consumer can go to a designated retail location and purchase the prepaid electronic card by tendering cash, or another acceptable medium of exchange, in the amount of the desired monetary value to "load" into the associated online electronic account.

In one preferred embodiment, the financial instrument is a prepaid electronic card
20 which includes a magnetic stripe card containing an account number, a unique vault code (which is used for identification purposes and which is preferably an alphanumeric or a

number), and the Uniform Recognition Location (URL) of an online computer where the electronic account is located. The account number is preferably stored as an encrypted alphanumeric account identifier, pre-encoded in the magnetic stripe. More preferably, the account number and vault codes, each preferably unique to the financial instrument, are pre-printed under a concealed scratch-off peal. The electronic card itself is optionally packaged with brief written information regarding its use, online registration procedures to follow and a cautionary label stating that the electronic card is not to be purchased if the scratch off peal has been removed or tampered with. Preferably, the URL is printed on or embedded in the card in a human readable format.

Upon receipt of payment, the designated retail location swipes the card through a magnetic card stripe reader on a conventional electronic data capture device (ECD). The ECD is pre-configured to read automatically the information contained in the magnetic stripe (or, in other embodiments, other media, e.g., optical memory, a hologram or two dimensional bar code, or to download data from semiconductor memory, but preferably a magnetic stripe).

The ECD will then attempt to authenticate the card as an authorized card based on a match between the alphanumeric account identifier encoded in the magnetic stripe and parameters preset in the ECD's memory function. If authenticated, the ECD will then prompt the retail outlet clerk to key enter, among other data, the "prepaid" monetary value to be loaded into the on-line electronic account and the clerk's identification number.

The ECD also is pre-configured to format an electronic packet containing, for example, the ECD's (or the retail location's) unique identification number, the monetary value key-entered by the retail outlet clerk, the encrypted alphanumeric account identifier,

date, and time. The packet is then transmitted by means of a dial-up session to a remote communications computer. The ECD thus is preferably a digital device or a software controlled microprocessor based device having suitable scanning or data downloading, data processing, and communications functionalities.

5 The actual transmission of the electronic packet, depending on the retail outlet, might occur over leased telephone lines, or digital communication means such as ISDN and frame relay commonly used in the transmission of credit card and other online payment data.

 The incoming packet is parsed and authenticated by the remote communications processor, which is linked or linkable to a database computer containing the electronic
10 account information in electronic data storage. The transmitted data is logged and stored in memory locations, and the database computer then activates the electronic account, i.e., indicates that the electronic account is now active and contains an outstanding balance corresponding to the monetary value contained in the packet, thus changing the electronic account status from inactive to active. An automatic transaction indicia is generated, and a
15 response packet is created by the remote communications processor and transmitted back to the ECD verifying the activation of the designated electronic account containing the designated monetary value.

 The verifying data (or some portion thereof) can then be printed at the retail outlet and the transaction indicia serves as the buyer's receipt and confirmation. The printed
20 confirmation also provides the date and time on which the funds loaded into the electronic account can be accessed.

In a more preferred embodiment, the monetary value is automatically denominated in the local currency in common use where the ECD is located. Such currency would be dollars in the U.S., Yen in Japan, pound sterling in the U.K., Euro in the participating common market nations, and so forth. Alternatively, the consumer may have an option to designate
5 the currency of the monetary value.

Although the present invention is described in connection with a magnetic stripe prepaid card as indicated, it is not so limited, and can involve other devices. One such alternative device is an electronic account and vault code (e.g., a unique vault identification number) together with usage instructions, including the URL of the computer containing the
10 electronic account which is communicated directly to a consumer by a financial service entity or intermediary such as a bank or brokerage house. In such an embodiment, the entity might be providing online PC "banking" or similar "financial" services to certain of its customers, and this add-on service would permit the customer to make online purchases much in the way a checking account is used to make one time payments to sellers of goods and services.

15 In this embodiment of the invention, each online PC banking customer is pre-assigned an electronic account and vault code by a financial institution already possessing a commercial relationship with such consumer (e.g., a depository relationship) and is able to link or "bind" the consumer's depository account number to the pre-assigned account number and vault code for the electronic account stored in the database. This permits a secure and
20 identifiable means for such a consumer to transfer monetary value into the prepaid electronic account via the payor initiated ACH fund transfer functionality of conventional online PC banking services.

Whether the buyer has purchased a physical magnetic stripe encoded prepaid card linked to an online electronic account through an ECD at a retail outlet, or has obtained a pre-activated electronic account through a third-party financial service intermediary such as a bank or some other medium reflecting a valid electronic account containing funds (i.e., an outstanding balance), the buyer is in the preferred embodiment required, prior to first use, to register online by logging onto the Internet from the buyer's computer and connecting to the URL provided.

Although in a preferred embodiment the buyer links to a remote Web computer (also referred to herein as a "remote gateway computer") by keying the designated URL from the buyer's personal computer, the application is not so limited. Rather, the application is intended to permit the link from an office computer, a computer kiosk, Internet café, or other computer linked to the Internet by means of a suitable Web browser.

Upon linking to the remote Web computer, the buyer is presented with an HTML (HyperText Markup Language) page containing a highly graphical welcoming document. The buyer is prompted to enter the account number for the electronic account in a secure session between the buyer computer and the remote Web computer. The remote Web computer authenticates the account number and, if the electronic account has been activated, links the buyer to a second page. The second page displays the buyer's unique vault code. The buyer is then prompted to compare the unique vault code provided to the buyer with the vault code displayed and confirm that the two match. If there is a match, the buyer is prompted to select a password, i.e., an alphanumeric personal identification number (PIN),

which actually may be a combination of upper and lower case, alphabet and numbers or some subset thereof.

The buyer is then preferably linked to a third page which is a registration page. The buyer is preferably provided with the choice of selecting from among at least two account
5 options, of which one option provides the buyer with a full refund of the account value in the event of a loss or theft of the account number and/or monetary value from the buyer's electronic account (the "full refund" option), and a second option which does not provide a full refund in the event of loss or theft, but provides the buyer with anonymity and full mobility (the "anonymity" option). In a preferred embodiment, a default option is provided,
10 preferably the full refund option.

In the event the buyer accepts the full refund option, the buyer is further prompted to provide an additional password (such as a secret identifier, for example, the buyer's mother's maiden name), and optionally to register certain additional information selected from among one or more of the following: (a) the buyer's name and preferred primary shipping address;
15 (b) a secondary shipping addresses; (c) a telephone number; and (d) an email address. The buyer is also instructed that in electing the full refund option, the following limitations are placed on the buyer's use of the prepaid card: (a) goods ordered online can only be shipped to a pre-registered address; (b) online purchases involving services can only be made upon authentication of the buyer's additional password (secret identifier) and; (c) the buyer can
20 only initiate purchases using the buyer's personal computer. The buyer also agrees, among other provisions, to take reasonable care to protect all electronic account information and passwords, to communicate any loss or theft immediately, to provide all information and

assistance in connection with the loss or theft, and if requested, to report the loss or theft to the police.

In the event the buyer elects the anonymity option and waives the loss and theft full refund option, the buyer is free to use the card without the registration of the additional
5 personal information and the usage restrictions described above. In such instance, the identity of the buyer is not associated with the electronic account, and the electronic account is non-refundable.

Upon completion of the registration process, the buyer is linked to the buyer's electronic account register. The electronic account register is a highly graphical log which
10 has the "look and feel" of a check book. The electronic account register contains columns or display data fields for suitable transaction identification information, such as a transaction number, date, time, payee, description of transaction, cardholder notes, payment/debit amount, deposit/credit, balance, status and messaging link. All charges or credits which affect the electronic account are recorded in the electronic account register, and all of the
15 column items, with the exception of the cardholder notes, are automatically generated by the database computer linked to the remote Web computer. The messaging link is an image containing an internal hyperlink which displays all messages between the seller, buyer and the remote Web computer pertaining to the recorded transaction.

In its preferred embodiment, the information is downloadable into commonly
20 available consumer accounting or financial planning/management applications.

Upon the activation and registration of the electronic account as described above, the buyer is thereafter enabled to begin paying for goods and services online from any seller which is set-up to accept such payments.

5 An online buyer is typically prompted by the seller's computer Web site through a series of steps involving the selection of goods and/or services, the number of each item, price, tax and shipping cost information where applicable, and upon confirmation of the goods and/or services to be purchased, the selection of the method of payment - whether online (e.g., credit card) or offline (e.g., mail a check or money order).

10 In a preferred embodiment, the invention includes the display of a graphical image on the seller's HTML page which, if selected, activates an HTML hyperlink which re-directs the buyer's connection to the remote Web computer containing the electronic account, and transmits all information applicable to the transaction, provided up to that point by the buyer, to the remote Web computer. Such information would include the goods and/or services to be purchased, shipping information and the charge amount.

15 Upon selection of the hyperlink embedded image, the buyer's computer is instantaneously re-direct linked in a secure, encrypted manner to the remote Web computer, which is preferably secure socket layer (SSL) enabled. This means that the information sent back and forth between the buyer's computer and the remote Web computer cannot be intercepted by a third party.

The buyer is presented with all of the information concerning the purchase, and is prompted to confirm the accuracy of the information. The buyer can either cancel the transaction by selecting a cancel button, or authorize payment by selecting a pay button.

If the pay button is selected, the buyer is asked to confirm the vault code (which is secret to the buyer), and if it matches, to enter his account number and password (PIN). The database computer linked to the remote Web computer first authenticates the input information, then queries the outstanding balance in the buyer's electronic account. If sufficient, the buyer's electronic account is debited the monetary value of the charge amount and the seller's electronic account is credited by the amount.

In this regard, a transaction number and authorization number are generated by the database computer and the buyer's screen displays his electronic account register with all of the information pertaining to the transaction as described above. At the same time, the authorization is transmitted to the seller by email informing the seller that the monetary amount of the charge has been credited to the seller's electronic account, and to log on to the seller's electronic account to confirm the particulars and provide remittance instructions.

In a preferred embodiment, the remote gateway computer provides the user with a number of payment options from which to select. The default payment option is the cash tender. This payment option involves the immediate transfer of monetary value from the buyer's electronic account to the seller's electronic account. This payment option is well suited, for example, where informational content is being purchased.

A second payment option is the two-step authorize and settle transaction. In this payment option, the buyer's electronic account is debited by the monetary value for a predetermined period of time, but the seller's electronic account is not credited with the monetary value until the goods purchased are shipped. Upon receipt of a confirmation of shipment, the monetary value is immediately credited to the seller's electronic account. In the meantime, the seller's register shows "pending" and the buyer's register shows "hold" in their respective transaction status registers. In the event the shipment confirmation is not received by the remote gateway computer within a predetermined period, the "hold" is released and the monetary value is returned to the buyer's electronic account while an email message is generated to the buyer and seller regarding this action.

A third payment option is deposit. In this payment option, the electronic account of the buyer (in this case, payor) is debited the applicable monetary value for a predetermined period of time. The monetary value is placed in an escrow account available for the seller (in this case, payee). The monetary value is not actually credited to the payee's electronic account until the payee selects a command which releases the funds, in whole or in part, into the payee's account. At such instant, a message is generated to the payor that the deposit amount was withdrawn by the payee. In the event the predetermined period of time elapses, and a payee withdrawal does not occur, the monetary value is returned to the payor's electronic account while a message is generated to both parties regarding this action.

A fourth payment option is the automated installment payment. In this payment option, the applicable monetary value is automatically debited from the electronic account of the buyer (or payor) on pre-specified dates (for example, weekly, monthly, yearly, etc.) and

the monetary value is credited to the payee's account. Upon such crediting, a message is generated to both parties regarding such credit or debit, as the case may be. In this payment option, the payor's electronic account is not debited until the actual pre-specified date, and a "hold" is not placed on the payor's electronic account. This means that on the pre-specified date, the payor's account might not contain sufficient funds. In such case, the payee's electronic account is not credited, and a message is generated to both parties regarding this failure to credit. In the absence of notification from the payor, automatic attempts are made daily for a period of five days to debit the payor's electronic account and with each attempt, a message is generated to both parties. Under this payment option, the payor has the option to cancel the installment payment schedule at any time. In such event, a message is generated to both parties regarding such action. This payment option is most applicable in subscription and membership payment situations where the payee needs an automated and regular method of charging a payor online, but where the payee wishes to retain control regarding the termination of the subscription or membership.

Both the buyer's and the seller's accounts are preferably located in the database computer (although linked multiple database computers could be used, particularly in scalable computer architecture designs). Indeed, the database computer can preferably contain a first plurality of electronic accounts for a first plurality of buyers, and a second plurality of electronic accounts for a second plurality of sellers, such that a particular financial transaction can be easily made between any one of the buyers and any one of the sellers having electronic accounts on the database computer.

In a preferred embodiment, the remote Web computer, together with all prompts and electronic account register information (with the exception of the payee and description of transaction entries) are presented by the user in the language of the country in which the prepaid card was purchased, or otherwise activated. This means that regardless of the language used by the seller's Web site, once the buyer is re-direct linked to the remote Web computer, all of the main components of the transaction are displayed in the buyer's native or preferred language. This feature of the present invention provides the buyer with a high degree of ease and comfort because no matter where the seller might be located in the world, the buyer is re-direct linked to a highly familiar "electronic purse" which is familiar, standardized and in the buyer's chosen language.

In one alternative embodiment, the buyer is presented with an option to override the default language setting and choose a different language. This feature of the present invention provides buyers in, say, Canada, to choose either English or French, or some other desired language.

It should be understood that the buyer is able to replenish his electronic account at any time, by one of at least two means. The first is to go to any retail outlet having an ECD where the electronic prepaid card is sold. The account holder can pay the sales clerk the amount by which he wishes to increase his balance. The sales clerk swipes the magnetic stripe card through the ECD, and reloads the underlying electronic account by the corresponding amount in the same manner the card was first activated. As describe above in detail, this is accomplished by means of the transmission of a packet to a remote communications processor as described above. While this method required an account

holder to physically go to a retail outlet, it permits those without bank checking accounts to reload their electronic accounts.

The second means is to replenish the electronic account by means of a checking account or other ACH transaction through an appropriate financial service entity. For example, in the event the buyer has a checking account with one of the more than 300 banks providing online PC banking, the buyer can initiate an ACH credit to his electronic account by connecting to his bank's designated Internet Web site.

Otherwise, the buyer can connect to the remote Web computer, obtain secured access by entering the appropriate confidential information concerning the buyer's electronic account, and select an option which permits the buyer to write an electronic check for deposit into his account. In such case, the remote Web computer displays a graphical representation of a check with the buyer's account number displayed in the "Pay to the Order of" field. The buyer keys in his bank account number, bank name and Federal Reserve bank routing number together with the monetary value of the check. Upon confirmation of the accuracy of the check, the buyer selects a submit button. Immediately, the buyer's register displays, and shows the deposit in a new entry with corresponding information in each of the applicable columns.

At this point however, the balance will not reflect the monetary value of the check submitted. Furthermore, the status register column will show "pending". Selecting the messaging image will link the buyer to a message explaining that the check has been received, and the electronic account outstanding balance will be increased by the amount of

the check once the check has cleared through the inter-bank check settlement network. As with all messaging, this message is automatically transmitted by email to the buyer's designated email address.

In the event of an account replenishment by means of a payor initiated PC banking ACH credit, the remote Web computer will generate an entry into the buyer's register once the funds have been received from the payor bank. In such instance, an email message is automatically generated and sent to the buyer confirming receipt of the funds and showing the increased amount of the account balance. Alternatively, an advice memorandum can be generated and mailed, documenting the transaction.

From the seller's perspective, the acceptance of payment involves a number of steps. In its preferred embodiment, the seller's computer connects to the URL of the remote Web computer reserved for seller registration. First, the seller is prompted to register bank account information where remittance funds can be electronically transmitted via ACH. Second, the seller is prompted to establish a seller's buyer electronic account by providing all of the information described above in connection with the initial registration of a buyer's electronic account. Third, the seller is prompted to provide a list of personnel authorized to have access to the seller's electronic account to view the register of all sales and credit transactions, together with each such person's access password (PIN number). Finally, the seller downloads and installs an HTML check out page and GIF (Graphics Interchange Format) image which enables the re-direct link of a buyer from the seller's computer to the remote Web computer upon the selection of the GIF image, as described above. Such image need not be limited to GIF, but might be created in JPEG (Joint Photographic Expert Group), or

other similar graphical file format used to display images on the World Wide Web. In the event the seller already possesses a checkout page, the seller will be provided with HTML code modifications which will re-direct link the buyer to the remote Web computer upon the selection of the GIF image by the buyer. This re-direct link simultaneously transmits all applicable checkout page information (product information, invoice number, charge amount, etc.) to the remote Web computer.

The seller also is provided with the option of (a) immediately and automatically remitting electronic account credits to their designated bank account; (b) keeping a designated balance and automatically sweeping any excess into remittances; or (c) keeping all credits in the electronic account subject to seller remittance instructions.

This feature of the present invention provides the seller with the ability to keep monetary value readily available in the seller's electronic account in order to make online purchase payments or refunds.

Specifically, the seller's electronic account is the mirror image of the buyer's electronic account register. The seller's electronic account register is a highly graphical log which has the "look and feel" of a checkbook. The register contains columns for displaying fields of information for one or more of, among other things, transaction identification number, date, time, payor, description of transaction, seller notes, deposit/credit, remittance/account transfer amount, outstanding balance, status and messaging link. All credits or remittances which affect the electronic account are recorded in the electronic account register, and all of the column items, with the exception of the seller notes, are

automatically generated by the database computer linked to the Web computer. The messaging link is an image containing an internal hyperlink which displays all messages between the seller, buyer and the Web computer pertaining to the recorded transaction.

Payments, other than remittances to the seller's registered bank account, preferably
5 can only be made in a two step process. First, the seller instructs monetary value to be transferred from the seller's electronic account to the seller's buyer electronic account. Such a transfer is automatically recorded in the seller's register as a transfer to the seller's buyer electronic account, accompanied with other register information. Second, only the authorized person (in a large merchant, this might be the treasurer or controller) possessing the account
10 number and password can then make payments out of this seller's buyer electronic account.

This two-step process ensures that the "need to know" and control of monetary value are compartmentalized. Personnel responsible for order fulfillment and shipping have online access to the status of payment receipts - information they need prior to shipment - and personnel responsible for accounting have control over remittances and payments of
15 monetary value.

In one preferred embodiment, the information is downloadable into commonly available consumer and merchant accounting applications.

In an alternate embodiment, the seller registers a name and address where remittances are sent in the form of a check, instead of the electronic means described above. This feature
20 provides sellers without a bank account the ability to accept payments from buyers by means of this invention.

In a preferred embodiment, the remote Web computer also provides promotional information to the user. Such promotional information can advantageously be dynamically altered to present the user with promotional information that is most suited to the actual purchases made by electronic account buyers. For example, a buyer exhibiting a pattern of purchasing certain or related sporting goods and services would be presented with promotional banner ads and promotional hyperlinks to online purveyors of similar or related sporting goods and services. While the specific identity and purchase data of buyers are held strictly confidential and are not disclosed to third parties absent the buyer's consent, promotional information can nevertheless be channeled to buyers to whom such promotional information would be of most interest. This feature of the present invention provides Internet advertisers with the ability to target (a) potential buyers with a history of actual online purchases (as opposed to online shoppers who simply browse); and (b) dynamically target promotions to audiences with demonstrated interests. In this regard, it is preferred that the database computer maintain a history of each buyer's purchases by appropriate categories so as to be able to use the history to select appropriate promotional information. This can be done by, for example, the pre-assignment of industry codes to registered sellers and product codes to the various goods and services sold, which, in combination, serve as the basis for determining the promotional information to be channeled to selected ones of said plurality of buyers. These codes can be tracked for each purchase by a buyer and a histogram of purchases by code (industry and/or product codes) can be compiled over one or more time periods, e.g., annual, monthly, seasonal (e.g., spring for purchase of gardening materials, etc.) The histograms can then be correlated (auto or cross correlation) with available promotional information or advertising (e.g., which is similarly coded) to identify and deliver the closest

matching advertising to the appropriate users (buyers or sellers, as the case maybe). Alternatively, users whose purchasing reflects a threshold level of purchases will trigger the direction of promotional information or advertising for such goods and/or services to the purchaser.

5 In a preferred embodiment, electronic messaging is an integral aspect of the invention. Such messaging provides a dual function: (a) it provides the buyer and seller with timely information regarding the status of buy/sell transactions; and (b) acts as a deterrent to the misuse of an electronic account by a third party.

10 While electronic messaging is a default feature for both buyers and sellers, the underlying transmission of email messages can be disabled for buyer electronic accounts where the default option pertaining to refund against theft and loss is not selected at the time of registration. In all other instances, an email message is preferably automatically generated at each step in a buy/sell transaction and is (a) sent to the relevant party (buyer, seller, financial service entity, shipping company, etc.); and (b) posted to the messaging page
15 hyperlinked to the electronic account register. Examples of instances where such email messages may be generated include, among others, the following: payment debit (buyer), payment credit (seller), monetary value reload (buyer), cancellation, shipment, pending status, remittance, transfer, and clearance.

Brief Description of the Drawings

20 Other characteristics, features and advantages of the present invention will appear to a person of ordinary skill in the art in view of the following detailed description, made with

reference to the drawings annexed, in which like reference characters refer to like elements, and in which:

FIG. 1 is a diagram of the computer configuration in accordance with a preferred
5 embodiment of the present invention;

FIG. 2 is a flow chart illustrating the purchase transaction between a merchant and a consumer using the system of FIG. 1;

FIG. 3 is a flow diagram of payment using the system of FIG. 1;

FIG. 4 is a representation of a graphical user interface in accordance with one
10 embodiment of the present invention;

FIG. 5 is a diagram representing a re-direct linking of a consumer's computer to the remote gateway computer;

FIG. 6 is a graphical illustration of a consumer's successful authentication to the remote gateway computer of FIG. 2; and

15 FIG. 7 is a graphical illustration of information messaging of FIG. 2.

Detailed Description of the Drawings

Referring to FIG. 1, a diagram illustrating the computer configurations used in a preferred embodiment of the present invention is shown. This configuration shows as the
20 Client 1, the retail outlet EDC 2, together with the user (seller or buyer, as the case may be) Web Browser 3, Email Reader 4, and the seller Internet commerce computer (Merchant Admin) 5. This configuration shows as the Middle 6 and Server 7 the remote gateway

computer (also called the "Remote Web Computer" or the "Web Server") 8 together with a plurality of linked computers, namely, the Communications Processor 9, Email Server 10, System Object Container 11, Payment Processor 12, and Database Computer (RDBMS) 13. Although not shown, it should be understood that there can be a plurality of ECDs 2, user
5 Web Browsers 3 and Email Readers 4 (such Web Browsers and Email Readers contained in a plurality of computers, in certain instances not physically located in the users' home or premises nor owned by the users), interconnected as described herein.

Communication link 14 to and from EDC 2 and the Communication Processor 9 is via modem connected to telephone lines, or by switchers and routers if connected via frame,
10 relay or by other suitable means of digital communication.

Communication link 15 to and from the Web Browser 3 contained in user computer and remote Web computer 8 (and Email Reader 4 and Email Server 10) are by use of a modem or switching and routing equipment, as the case may be, from the respective computers to the Internet.

15 The remote gateway computer (Web server) 8 is networked with the Communications Processor 9, Database Computer 13, Payment Processor Computer 12 and the Email Server 10. A firewall server 16 is situated between the Web Server 8 and Email Server 10 and rest of the computers in the network.

Referring to FIG. 2, a flow-chart illustrating the purchase transaction between a seller
20 (Merchant) 17, buyer (Consumer) 18 and the remote gateway computer 8 with all computers linked to it, collectively, Processing Center 19. The buyer (Consumer) 18 browses using

connection 20 in the seller (Merchant) Web site 17 and decides to make a purchase by issuing a purchase request 21. The buyer 18 navigates through the merchant Shopping Cart 22 and selects the payment method embodied by the present invention (denominated the "iCashCardTM" financial instrument). This selection re-direct links the buyer 18 to the Processing Center 19 over link 23, simultaneously transmits all shopping cart information pertinent to the purchase to the Processing Center 19, and the link 20 between the buyer 18 and the seller 17 is broken. "iCashCardSM" is a service mark for the method of payment, and iCashCardTM is a trade mark for a financial instrument, and both are owned by Pacifica Group Holding Inc., Honolulu, Hawaii, the assignor hereof.

10 The re-direct link 23 between the buyer 18 and the Processing Center 19 is via an SSL session, and a secret key exchange occurs, as illustrated by link 24. The buyer 18 is prompted to provide an account number, match the vault code and provide a password. Upon authentication, the buyer 18 is permitted access to his electronic account 25 and can authorize the payment upon reconfirming the accuracy of all information pertaining to the purchase, including the charge amount, purchase item, quantity, shipping information, etc.

 Upon payment authorization, the buyer's electronic account outstanding balance is debited the monetary value of the charge at step 26, the seller's electronic account outstanding balance is credited by said monetary amount, and a notification is transmitted to both the seller and buyer regarding the completion of the financial transaction at step 27.

20 At this point the link between the buyer 18 and Processing Center 19 is disconnected.

In this example, the purchased item is then shipped to the buyer 18 at step 28, and an email confirmation is transmitted to the buyer 18 and the Processing Center 19.

FIG. 3 is a diagram which illustrates the flow of payment among the various parties. Upon payment by the buyer 18 of monetary value to activate an electronic account as represented by dashed line 29, the Retail Outlet EDC 2 in communication with the Processing Center 19 triggers an ACH debit communication from the Processing Center 19 to its Bank 30. Bank 30 communicates with the Retail Outlet Bank 31 to debit the Retail Outlet's account and credit the Processing Center account maintained at Bank 30 in the amount of the aforementioned monetary value.

10 The monetary value is available to the Consumer/Buyer 18 and the buyer makes a purchase from the Merchant/Seller 17. The Merchant/Seller 17, in this example, elects to remit the monetary value in full to its bank account in Bank 34. The Merchant/Seller's decision to remit triggers an ACH credit communication from the Processing Center 19 to its Bank 30. Bank 30 communicates with the Merchant/Seller Bank 34 to credit the Merchant/Seller account maintained at Bank 34 in the amount of the aforementioned value. 15 At the same time, Bank 30 debits the Processing Center 19 account.

In the event the Consumer/Buyer 18 chooses to replenish his electronic account in the Processing Center and such buyer subscribes to an online PC home banking service permitting ACH fund transmissions, Bank 35 communicates with Bank 30 to credit the Processing Center's account in the amount specified by the buyer. 20

FIG. 4 graphically illustrates the GIF image 36 which is installed on the seller's payment page in one embodiment of the present invention. In this embodiment, the image 36 bears a trademark or logo of the enterprise operating the remote gateway computer 8, e.g., the iCashCard™ trademark of the assignee of this invention.

5 FIG. 5 graphically illustrates the re-link of the buyer's computer to the gateway computer 8 Web site 37. Upon clicking the image 36, the buyer is re-direct linked to the remote gateway computer 8, and the link with the seller's computer is broken. In a preferred embodiment of the present invention, the buyer 18 is prompted to choose a number of options. If the buyer 18 is unfamiliar with this payment method and medium, the buyer can
10 click an image 38 which links the buyer to a page which explains the benefits of the payment medium and method.

If the buyer 18 wants to purchase an electronic account, the buyer is prompted to enter the zip code where the buyer resides, and click a "Search" 39. This links the buyer 18 to a page which provides, in the preferred embodiment of the present invention, a list of Retail
15 Outlets 2 where the electronic account may be purchased, together with telephone number, address and map information.

If the buyer 18 possesses an activated electronic account and wishes to pay for the purchase, the buyer 18 is prompted to click the "Pay Now" image (button) 40. This links the buyer to a new page 41 which prompts the buyer to enter his account number 42. If
20 authenticated, the page 41 displays the unique vault code 43 and prompts the buyer to compare this number with the vault code provided to the buyer at the time of initial

registration to ascertain an exact match. If the account number fails to be authenticated, the buyer is provided with three attempts. If all attempts fail, the session with the buyer is terminated.

FIG. 6 graphically illustrates the event of an exact match of the vault identification number. The buyer 18 is prompted to select "Password" 44. This links the buyer 18 to a new page 45, which prompts the buyer to enter a password 46. In one embodiment of the present invention, this page also displays promotional information (advertising) 47 which the buyer 18 can review.

If the PIN 46 is authenticated, the buyer is linked to a new page 48 which displays all of the pertinent information regarding the purchase and the buyer is prompted to confirm the accuracy of the information. If the password 46 is not authenticated, the buyer is provided with three attempts. If all attempts fail, the session is terminated, and the buyer is not able to access his electronic account for a preset time, e.g., until the following day.

If the buyer 18 is satisfied with the information, the buyer is prompted to click "Pay Now" image 49. This links the buyer to a new page 50 which displays the buyer's electronic account register 50. This Register 50 has the "look and feel" of a check book register or a credit card statement, and provides the transaction information, e.g., a transaction number, date, time, payee, description of the transaction, payment/debit amount, deposit/credit amount, balance, status. Preferably, the Register 50 also has hotlink buttons to any buyer notes and transaction messages. All aforementioned components of the transaction record - with the exception of Notes, which is an option by which the buyer can keep manually

entered information pertaining to the transaction - are automatically generated and recorded. The Status field 51 dynamically changes to reflect the status of the transaction (verifying, debiting, pending, etc.).

FIG. 7 illustrates a typical message 52 which might display when the buyer selects the messaging link from the Online Register 50.

It is clear from the foregoing that the present invention provides the seller and buyer a new financial payment method and medium for online commerce possessing the key attributes of cash and check, while also accommodating the exigencies of multiple currency and languages.

It should be understood that the foregoing is preferably implemented using conventional and existing technology for Internet-based communications and ACH commerce, and thus does not require implementing any new or emerging technology not well known to persons of ordinary skill in the art. Consequently, it is believed that a person of ordinary skill in the art may readily create software and hardware combinations suitable for performing the functionality described herein, and may create such systems using any of a number of different programs, routines and programming languages by persons of ordinary skill in the art, and indeed such designs can adapt to use new and emerging technology, for example, regarding secure communications (with or without encryption), electronic messaging, and inter-computer communication media and protocols, and the like, as the same may be hereinafter developed. Further, the computer and database architecture can be

scalable in design such that additional hardware and software can be easily added to the initial system as the number of electronic accounts and the number of transactions grow.

One skilled in the art will appreciate that the present invention can be practiced by other than the described embodiments, which are presented for purposes of illustration and
5 not of limitation.

We claim:

1. A financial payment system permitting the tender and acceptance of a monetary amount associated with a particular financial transaction as between one of a plurality of buyers and a one of a plurality of sellers on the Internet comprising:

5 a plurality of account instruments, each account instrument being associated with a buyer and having an account number, a unique vault code, and a password associated therewith;

a remote gateway computer having a URL; and

a database computer linked to the remote gateway computer in secure
10 communications therewith, said database computer having a memory storing a plurality of electronic accounts respectively associated with the plurality of account instruments, each of said electronic accounts further comprising data including an account number, a password, and an outstanding balance;

wherein the remote gateway computer further comprises

15 means for receiving an account number, a unique vault code, a password and a monetary amount associated with said particular transaction,

means for verifying if the received account number, vault code and password
match the account number, vault code and password stored in said database for the electronic
account corresponding to said received account number, and

20 means for adjusting the electronic account outstanding balance for the input electronic account by the monetary amount in response to a verified match.

2. The system of claim 1 wherein the database computer further comprises a plurality of seller electronic accounts, each of said plurality of seller electronic accounts being associated with a seller and having data including an outstanding balance, the system further comprising means for establishing a secure session connection between the remote gateway computer and a user-computer, wherein, in response to an account number, vault code and password input from said user-computer matching the corresponding account number, vault code and password stored in the database computer memory for an electronic account, the adjusting means adjusts the electronic account outstanding balance by the monetary amount of said financial transaction.

3. The system of claim 2 wherein the user-computer further comprises a buyer's computer and wherein the financial transaction is a purchase and the adjusting means reduces the user's electronic account outstanding balance by said monetary amount.

4. The system of claim 1 further comprising a remote payment processing computer linkable to the remote gateway computer, said remote payment processing computer comprising means for inputting an account number and means for generating an ACH transaction to the electronic account outstanding balance stored in said database computer for said input account number, said ACH transaction being one of a disbursement and a collection.

5. The system of claim 1 further comprising:
means for establishing a history of online financial transactions for selected ones of said plurality of buyers, said history being categorized by type of goods and services purchased;

a seller-computer having a means for providing the seller with online access to the Internet, the seller computer including promotional information regarding a set of goods and services sold by the seller, and means for directing said promotional information to buyers having an established history of purchasing said set of goods or services.

5

6. The system of claim 1 further comprising:

an electronic capture device (ECD) located remotely from said remote gateway computer having a unique identification code, and

a communications computer capable of authenticating and accepting an electronic
10 packet containing data including the unique identification code of the ECD, an account number, a second monetary amount to be credited to the electronic account outstanding balance associated with said account number in said database computer, the date and time of the transmission, the remote communications computer being linked to said database computer;

15 wherein the EDC further comprises;

capturing means, upon the payment by a buyer of the second monetary amount
to be stored in the electronic account, for capturing the second monetary amount and capturing the account number from the financial instrument;

means for formatting the captured information into an electronic packet
20 capable of transmission over a telephone line to the remote communications computer;

means for transmitting the electronic packet to the remote communication computer; and

means for receiving a response packet from the remote communications computer and producing a confirming receipt for the buyer;

wherein the remote communications computer comprises means for automatically activating an electronic account in said database computer and increasing the outstanding
5 balance for said electronic account with said second monetary amount and generating and transmitting a response packet to said ECD.

7. The system of claim 6 wherein said financial instrument further comprises a magnetic stripe card containing said account number and vault code printed in human readable form
10 under a concealed scratch off peel, and wherein an account identifier in an encrypted alphanumeric format is pre-encoded in the magnetic stripe.

8. The system of claim 7 wherein the magnetic stripe card further comprises a face having printed thereon the remote gateway computer URL.
15

9. The system of claim 6 wherein the financial instrument further comprises a card, a memory structure affixed to the card and containing said account number in an encrypted form and said vault code, wherein the memory structure is selected from among the group consisting of a semiconductor memory, a hologram, a two dimensional bar code, and a
20 magnetic recording media.

10. The system of claim 6 wherein the outstanding balance contained in the activated electronic account is denominated in a local currency where the ECD is located.

11. The system of claim 6 further comprising:

means for pre-activating an account number stored in said database computer,
said pre-activated account number being associated with one of said plurality of
5 buyers;

means for linking a depository account of a financial service entity, said
depository account being associated with said buyer's pre-activated electronic account
in said database computer; and

10 means for transferring securely a monetary amount from said financial service
entity depository account into said pre-activated electronic account.

12. The system of claim 6 further comprising a unique vault code associated with each
buyer, wherein the ECD capturing means further comprises means for receiving the buyer's
unique vault code to authenticate the identity of the remote gateway computer, and second
15 means for capturing the buyer's password in response to said capturing means authenticating
the identity of the remote gateway computer.

13. The system of claim 6 further comprising means for requiring the buyer, prior to a
first use of said financial instrument, to register on the remote gateway computer and select
20 one of at least two options:

- a) a full refund option against theft and/or loss of the account number or
monetary amount from the electronic account, and
- b) an anonymity option regarding the identity of the buyer.

14. The system of claim 13 wherein the requiring means further requires the buyer selecting the full refund option to register at least one limitation on use of said financial instrument selected from among the group consisting of:

- 5 a) an additional password,
- b) a buyer's name and a shipping address,
- c) a buyer's email address, telephone number and physical address where correspondence is to be mailed,
- d) a shipping address, wherein goods purchased online can only be sent to the buyer's
- 10 registered shipping address,
- e) an additional password, wherein online purchases involving services can only be made upon the authentication of the buyer's additional password,
- f) buyer can only initiate purchases using the buyer's personal computer,
- g) a registered e-mail address, wherein all purchases will be confirmed by an email
- 15 message to the buyer's registered email address, and the buyer loses the right to seek a refund against loss or theft of a monetary amount in the event of any unauthorized use if such loss or theft remains unreported by the buyer for a pre-determined period following the transmission of such email message.

- 20 15. The system of claim 3 wherein the buyer and seller's stored electronic account data further comprises a graphical log of transaction information.

16. The system of claim 15 wherein the transaction information comprises at least one field of display data selected from among the group consisting of a transaction identification number, date, time, payee, payor, description, notes, payment/debit amount, deposit/credit, outstanding balance, status and messaging link.

5

17. The system of claim 16 wherein the remote gateway computer further comprises means for dynamically presenting display information in a predetermined language for each of the buyer and seller.

10 18. The system of claim 1 wherein the remote gateway computer further comprises means for dynamically presenting display information in a predetermined language for each of the buyer and seller.

15 19. The system of claim 2 further comprising a seller's computer having installed therein an HTML application which transmits a data set of applicable information provided by the buyer associated with said financial transaction to the remote gateway computer.

20 20. The system of claim 19 further comprising means for re-direct linking the buyer's computer to the remote gateway computer and establishing an encrypted and secure session for the provision by the buyer of a password to the remote gateway computer.

21. The system of claim 2 further comprising means for transmitting a confirmation to the seller that a monetary amount has been credited to the seller's electronic account outstanding balance.

5 22. The system of claim 4 further comprising means for replenishing the buyer's electronic account, including:

means for reloading the buyer's account outstanding balance through the ECD capture of an additional monetary amount and the account number on the financial instrument and transmission of the captured information to the remote communications computer, and

10 means for transmitting a monetary amount directly from the buyer's depository account at a financial service entity in a buyer-initiated ACH transfer.

23. The system of claim 1 wherein said monetary amount has a first local currency value and further comprising means for converting the first local currency value to a second
15 currency value using a currency conversion rate in response to the first local currency of the seller being different from the local currency of the buyer.

24. The system of claim 1 further comprising means for recording a history of electronic account purchases for said plurality of electronic account numbers wherein the remote
20 gateway computer further comprises means for providing promotional information to the buyer, such promotional information being dynamically tailored to the electronic account purchase history of said buyer.

25. The system of claim 19 wherein the database computer further comprises a register associated with each electronic account, said register including transaction information corresponding to each financial transaction for said electronic account, said register being password accessible to said electronic account user further comprising means for generating
5 e-mail messages automatically at each step of a financial transaction and simultaneously sending such e-mail messages to the relevant user and posting such e-mail messages to a messaging page hyperlinked to the user's register.

26. The system of claim 2 wherein the remote gateway computer further comprises means
10 for allowing the seller to register:

a bank account where remittances are to be sent and the options available for such remittances;

to open a seller's buyer electronic account

a password permitting certain of its employees access to information contained in the
15 seller's electronic account.

27. The system of claim 26 wherein the allowing means further comprises means for allowing the seller to select, in connection with remittances, at least one of:

- a) immediately and automatically remitting electronic account credits to the seller's
20 registered bank account,
- b) keeping a designated balance and automatically sweeping any excess into remittances,
and

c) keeping all credits in the seller's electronic account subject to a seller remittance instruction.

28. The system of claim 1 further comprising means for providing the buyer and seller
5 with a mutually transparent payment option for said financial transaction.

29. The system of claim 28 where in the mutually transparent payment option is selected from among the group consisting of cash tender, two-step authorize and settle, deposit, and installment structures.

10

30. A financial payment method for the tender and acceptance of a monetary amount associated with a particular financial transaction as between one of a plurality of buyers and a one of a plurality of sellers on the Internet comprising:

providing a buyer with an account instrument having an account number, a unique
15 vault code, and a password associated therewith;

providing a remote gateway computer having a URL; and

providing a database computer, said database computer having a memory for storing a plurality of electronic accounts respectively associated with the plurality of account instruments, providing each of said electronic accounts with data including an account
20 number, a password, and an outstanding balance;

linking the database computer with the remote gateway computer in secure communications therewith;

registering said buyer account instrument with a remote gateway computer;

initiating a financial transaction on said Internet;

transmitting to the remote gateway computer an account number, a unique vault code, and a password associated with said financial instrument and a monetary amount associated with said particular transaction,

5 verifying if the account number, vault code and password received at the remote gateway computer match the account number, vault code and password stored in said database computer for the electronic account corresponding to said received account number, and

adjusting the electronic account outstanding balance for the input electronic account
10 by the monetary amount in response to a verified match.

31. The method of claim 30 further comprising providing the database computer with a plurality of seller electronic accounts, each of said plurality of seller electronic accounts being associated with a seller and having data including an outstanding balance, establishing
15 a secure session connection between the remote gateway computer and a user-computer, inputting an account number, vault code and password input from said user-computer matching the corresponding account number, vault code and password stored in the database computer memory for an electronic account, and in response to a match, adjusting the electronic account outstanding balance by the monetary amount of said financial transaction.

20

32. The method of claim 31 wherein the financial transaction is a purchase by a buyer and adjusting the electronic account outstanding balance further comprises reducing the electronic account outstanding balance by said monetary amount.

33. The method of claim 30 further comprising providing a remote payment processing computer linkable to the remote gateway computer, inputting an account number to said remote payment processing computer, and generating an ACH transaction to the electronic
5 account outstanding balance stored in said database computer for said input account number, said ACH transaction being one of a disbursement and a collection.

34. The method of claim 30 further comprising:

establishing a history of online financial transactions for selected ones of said
10 plurality of buyers, said history being categorized by type of goods and services purchased;

providing the seller with online access to the Internet, including promotional information regarding the goods and services sold by the seller, and

directing said promotional information to buyers having an established history of purchasing such goods or services.

15

35. The method of claim 30 further comprising:

providing an electronic capture device (ECD) located remotely from said remote gateway computer having a unique identification code, and

providing a remote communications computer linked to said database computer;

20 capturing, at the ECD, a monetary amount corresponding to a payment by a buyer of an amount to be stored in the buyer's electronic account and the account number from the financial instrument;

formatting, at the ECD, the captured information into an electronic packet capable of transmission, said electronic packet containing data including the unique identification code of the ECD, an account number, and a monetary amount to be credited to the electronic account outstanding balance associated with said account number in said database computer;

5 transmitting the electronic packet to the remote communication computer; and

receiving the electronic packet at the remote communications computer and, in response thereto, activating an electronic account in said database computer, adding said monetary amount to the electronic account outstanding balance, and generating and transmitting a response packet to said ECD; and

10 receiving the response packet from the remote communications computer and producing a confirming receipt for the buyer.

36. The method of claim 35 wherein providing said financial instrument further comprises providing a magnetic stripe card containing said account number and vault code
15 printed in human readable form under a concealed scratch off peel, and wherein an account identifier in an encrypted alphanumeric format is pre-encoded in the magnetic stripe.

37. The method of claim 36 wherein providing the magnetic stripe card further comprises
printing thereon the remote gateway computer URL.

20

38. The method of claim 36 wherein providing the financial instrument further comprises a providing a card with a memory structure containing said account number in an encrypted form and said vault code, wherein said memory structure is selected from among the group

consisting of a semiconductor memory, a hologram, a two dimensional bar code, and a magnetic recording media.

39. The method of claim 35 further comprising denominating the monetary amount
5 contained in the activated electronic account in a local currency where the ECD is located.

40. The method of claim 35 further comprising pre-activating an account number stored
in said database computer, linking a depository account of a financial service entity having a
depository account associated with a buyer to said buyer's electronic account in said database
10 computer, and transferring securely a monetary amount from said financial service entity
depository account to the pre-activated electronic account for said buyer.

41. The method of claim 35 further comprising providing a unique vault code and
password associated with each buyer to the ECD, and providing said unique vault code to the
15 remote gateway computer to authenticate the identity of the remote gateway computer prior
to providing the buyer's password to said remote gateway computer.

42. The method of claim 35 further comprising requiring the buyer, prior to a first use of
said financial instrument, to register on the remote gateway computer and select one of at
20 least two options:

- a) a full refund option against theft and/or loss of the account number or
monetary amount from the electronic account, and
- b) an anonymity option regarding the identity of the buyer.

43. The method of claim 42 wherein the requiring step further comprises requiring the buyer selecting the full refund option to register at least one limitation on use selected from among the group consisting of:

- 5 a) an additional password,
- b) a buyer's name and a shipping address,
- c) a buyer's email address, telephone number and physical address where correspondence is to be mailed,
- d) a buyer's shipping address, wherein goods purchased online can only be sent to the
- 10 buyer's registered shipping address,
- e) an additional password, wherein online purchases involving services can only be made upon the authentication of the buyer's additional password,
- f) buyer can only initiate purchases using the buyer's personal computer,
- g) an e-mail address, wherein all purchases will be confirmed by an email message to the
- 15 buyer's registered email address, and the buyer loses the right to seek a refund against loss or theft of a monetary amount in the event of any unauthorized use if such loss or theft remains unreported by the buyer for a pre-determined period following the transmission of such email message.

20 44. The method of claim 31 further comprising providing each electronic account with a graphical log of transaction information corresponding to financial transactions concerning said electronic account.

45. The method of claim 44 wherein providing the transaction information further comprises displaying at least one field of data selected from among the group consisting of a transaction identification number, date, time, payee, payor, description, notes, payment/debit amount, deposit/credit, outstanding balance, status and messaging link.

5

46. The method of claim 45 further comprising dynamically presenting display information in a predetermined language for each of the buyer and seller.

47. The method of claim 30 further comprising dynamically presenting display
10 information in a predetermined language for each of the buyer and seller.

48. The method of claim 31 further comprising installing on a seller's computer an application which executes a script on the seller's computer transmitting a set of data of applicable information provided by the buyer associated with said financial transaction to the
15 remote gateway computer, and, subsequent to the step of initiating financial transaction, executing said application to transmit said applicable information to the remote gateway computer.

49. The method of claim 48 wherein the step of executing said application further
20 comprises re-direct linking the buyer's computer to the remote gateway computer and establishing an encrypted and secure session for the provision by the buyer of a password to the remote gateway computer.

50. The method of claim 31 further comprising transmitting a confirmation to the seller that a monetary amount has been credited to the seller's electronic account outstanding balance.

5 51. The method of claim 30 further comprising reloading the buyer's electronic account outstanding balance through the ECD capture of an additional monetary amount and the account number on the financial instrument and transmission of the captured information to the remote communications computer.

10 52. The method of claim 30 further comprises transmitting a monetary amount directly from a depository account of the buyer at a financial service entity in a buyer-initiated ACH transfer to replenish the buyer's electronic account.

53. The method of claim 30 wherein the monetary value of the financial transaction is in a
15 first local currency, further comprising determining that the seller's first local currency is different from the buyer's local currency, and converting the first local currency value to a second currency value using a currency conversion rate in response to the seller's first local currency being different from the local currency of the buyer.

20 54. The method of claim 30 further comprising recording a history of electronic account purchases for selected ones of said plurality of electronic account numbers, selecting promotional information dynamically tailored to the electronic account purchase history of

one of said selected ones of said buyers, and providing said selected promotional information to said one buyer.

55. The method of claim 30 further comprising providing each electronic account with a register of transaction information corresponding to financial transactions concerning said account, generating e-mail messages automatically at each step of a financial transaction and simultaneously sending such e-mail messages to the relevant party and posting such e-mail messages to a messaging page hyperlinked to the electronic account register of the relevant party.

10

56. The method of claim 31 further comprising registering for the seller at least one of:

- a) a bank account where remittances are to be sent and the options available for such remittances;
- b) a seller's buyer electronic account; and
- 15 c) a password permitting access to information contained in the seller's electronic account.

57. The method of claim 55 further comprising providing the seller with an option selected from among:

- 20 a) immediately and automatically remitting electronic account credits to the seller's registered bank account,
- b) keeping a designated balance and automatically sweeping any excess into remittances, and

b) keeping all credits in the seller's electronic account subject to seller remittance instructions

58. The method of claim 30 further comprising providing the buyer and seller with a
5 mutually transparent payment option.

59. The method of claim 58 further comprising selecting a mutually transparent payment option from among the group consisting of a cash tender, a two-step authorize settle, a deposit, and an installment payment structure.

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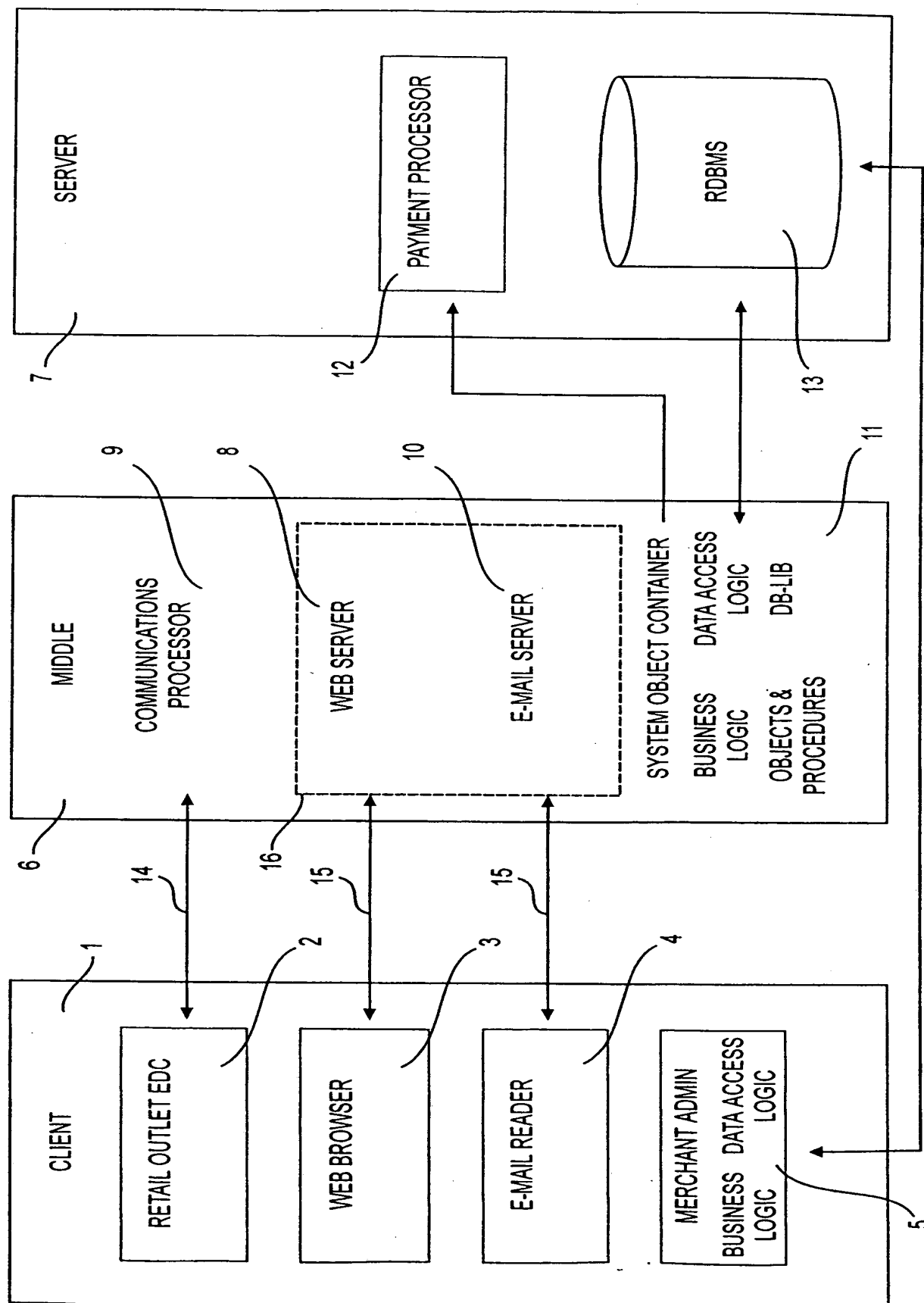


FIG. 1

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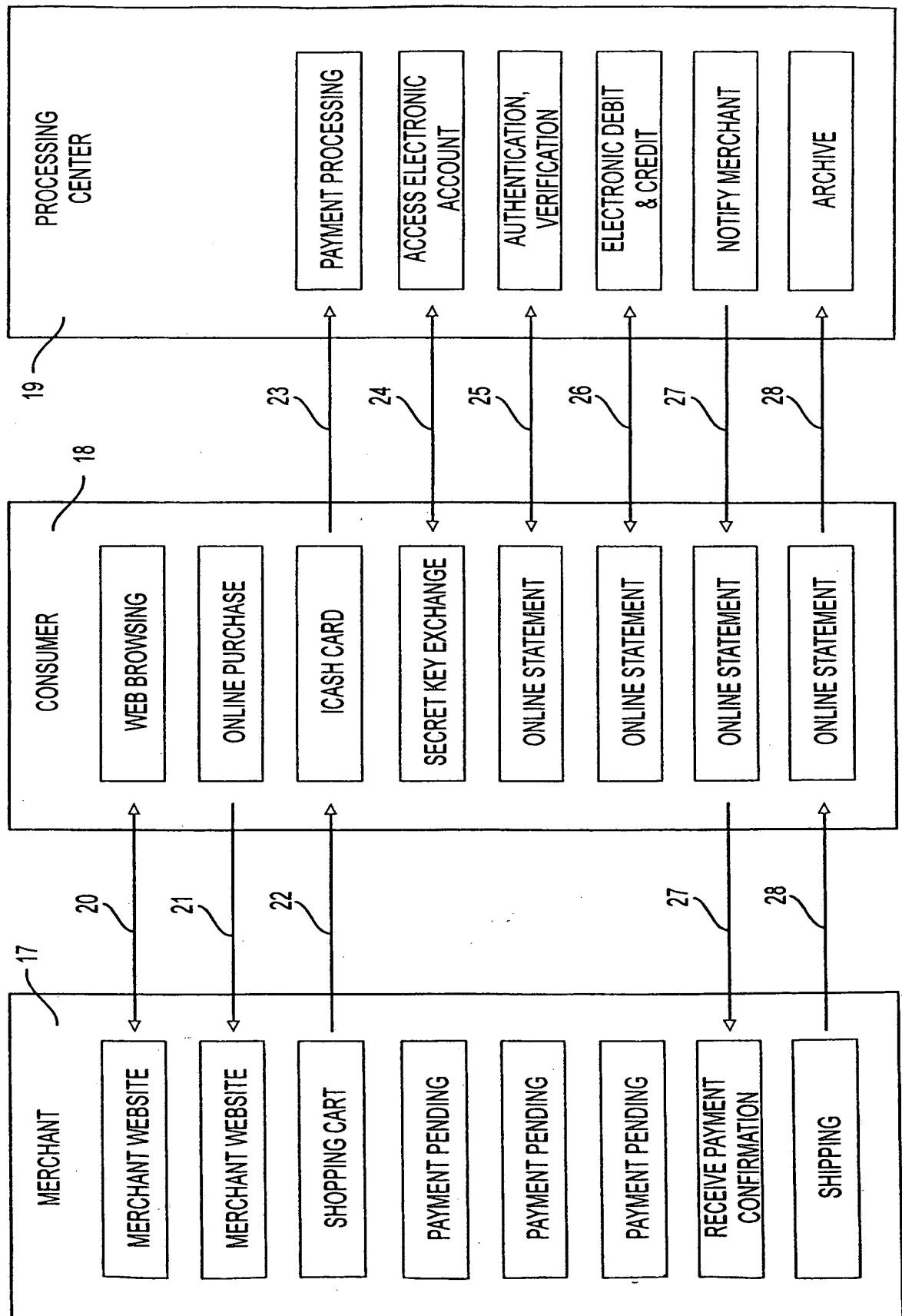
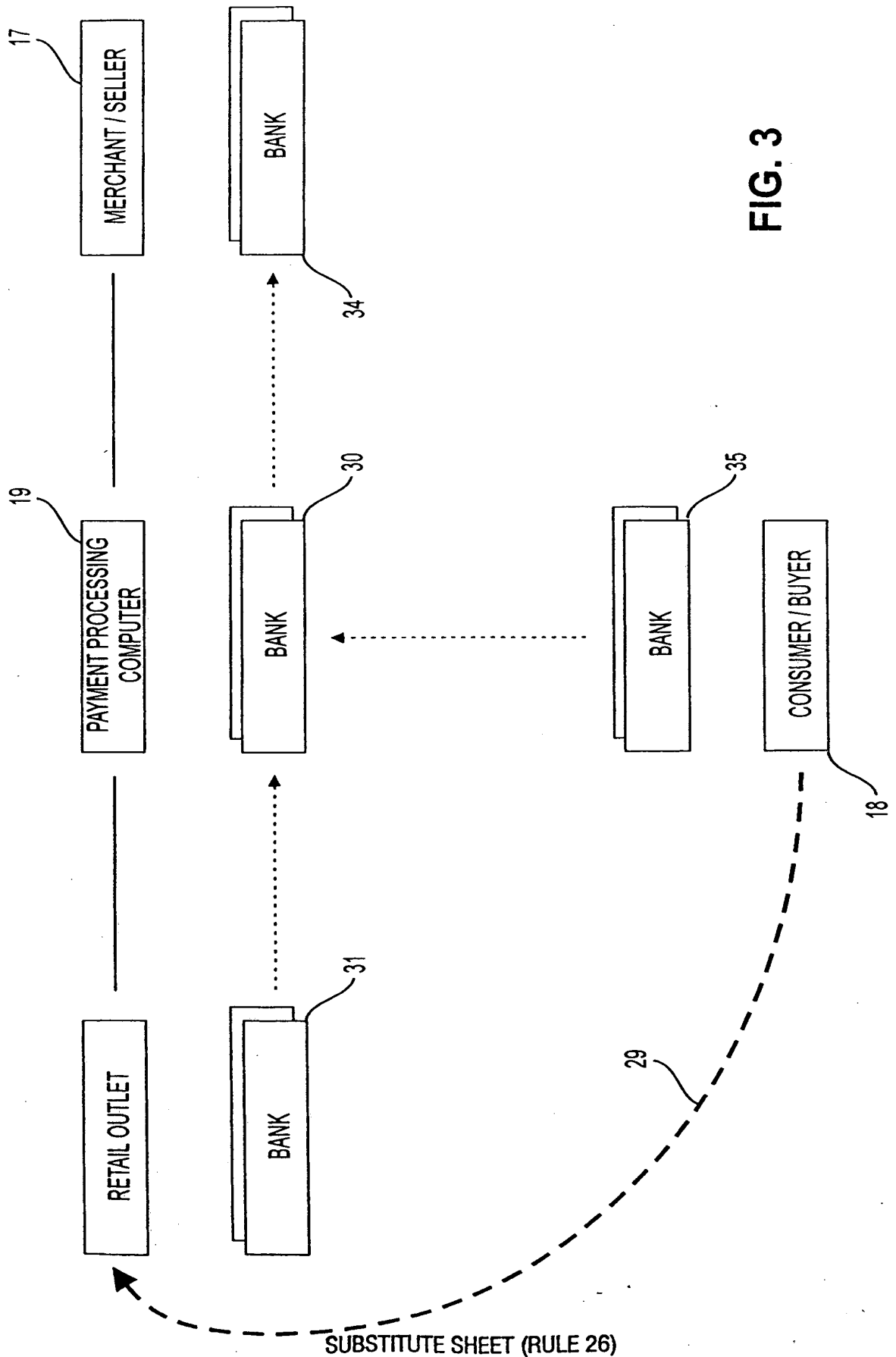


FIG. 2

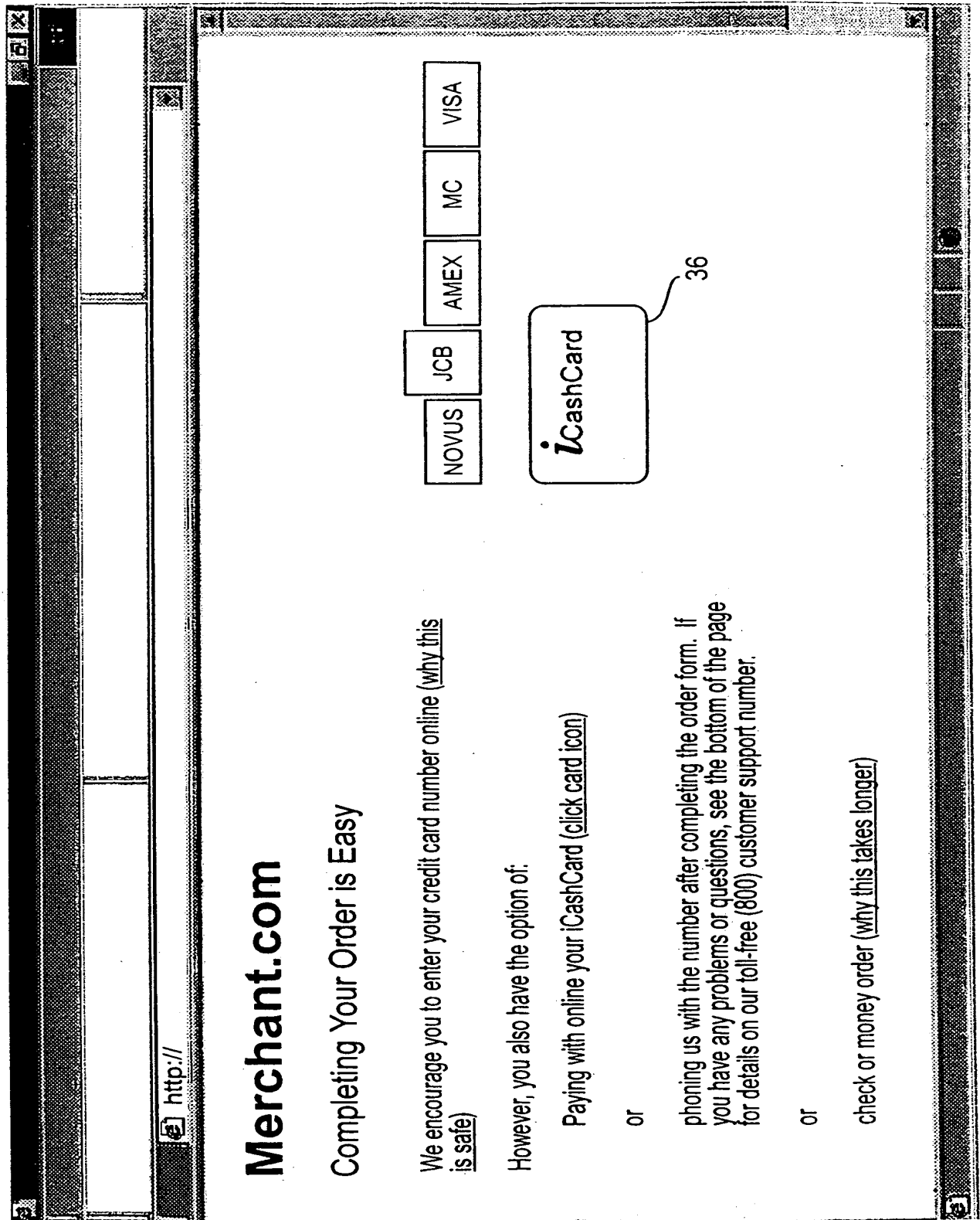
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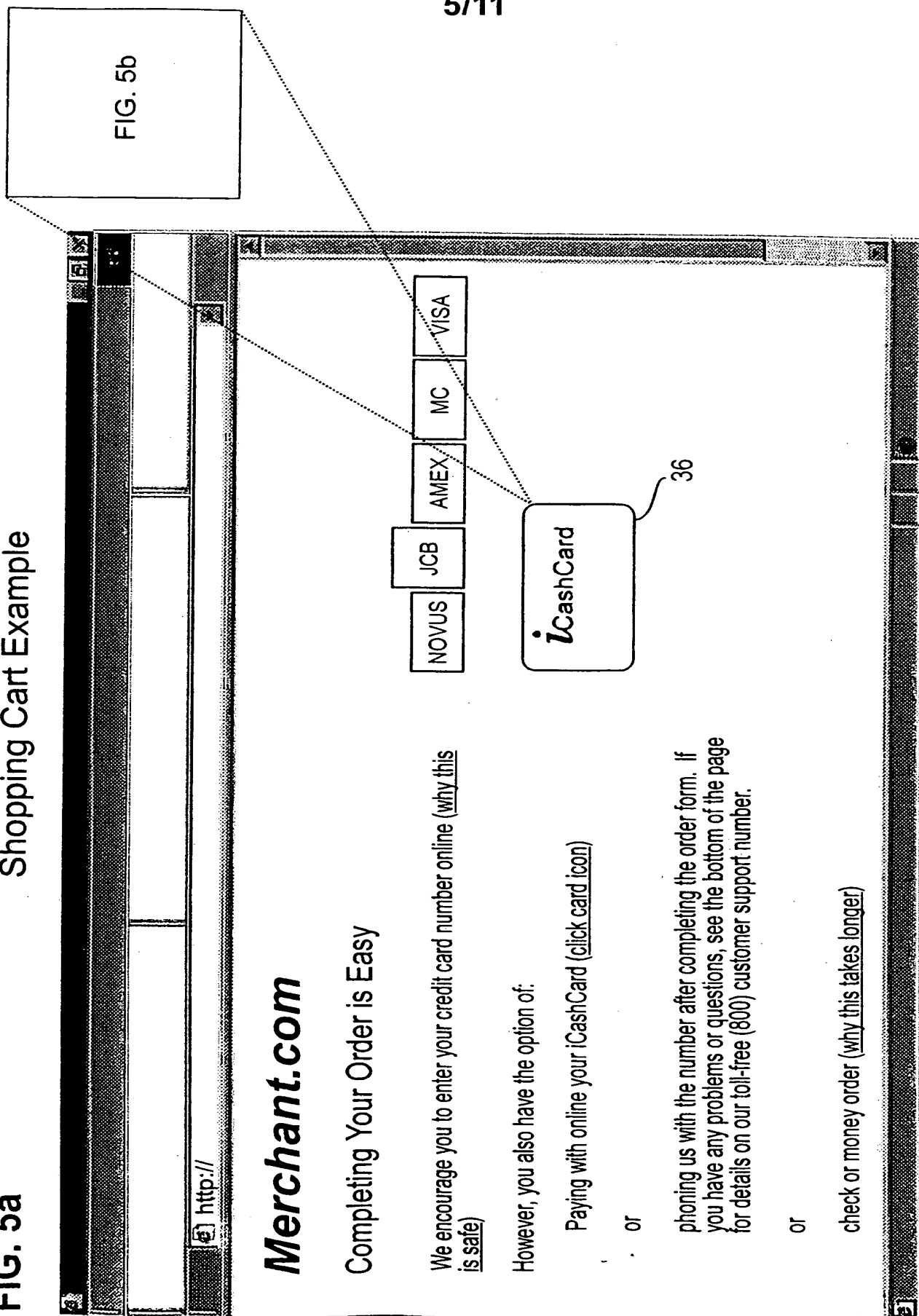
Shopping Cart Example



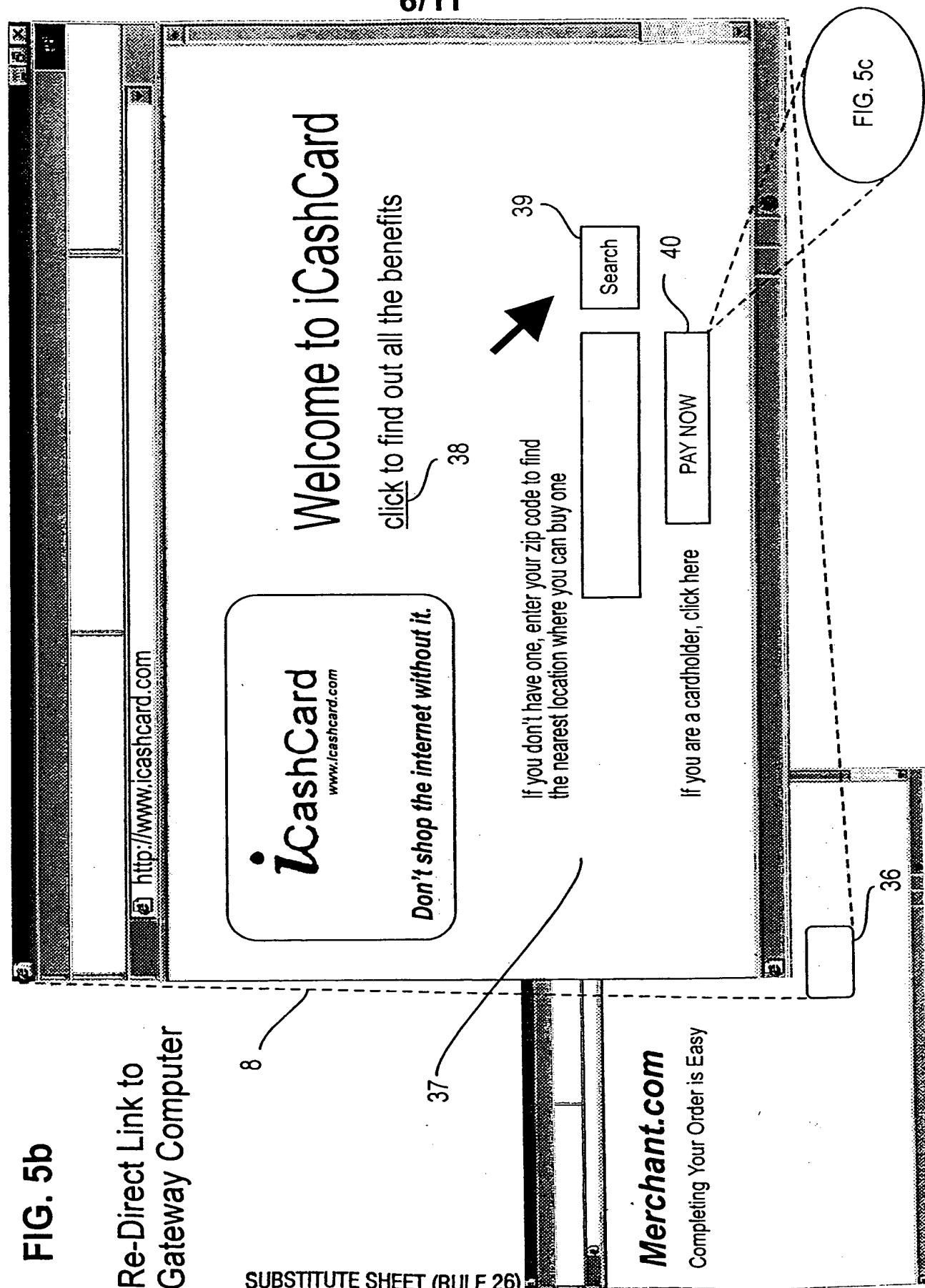
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Shopping Cart Example

FIG. 5a



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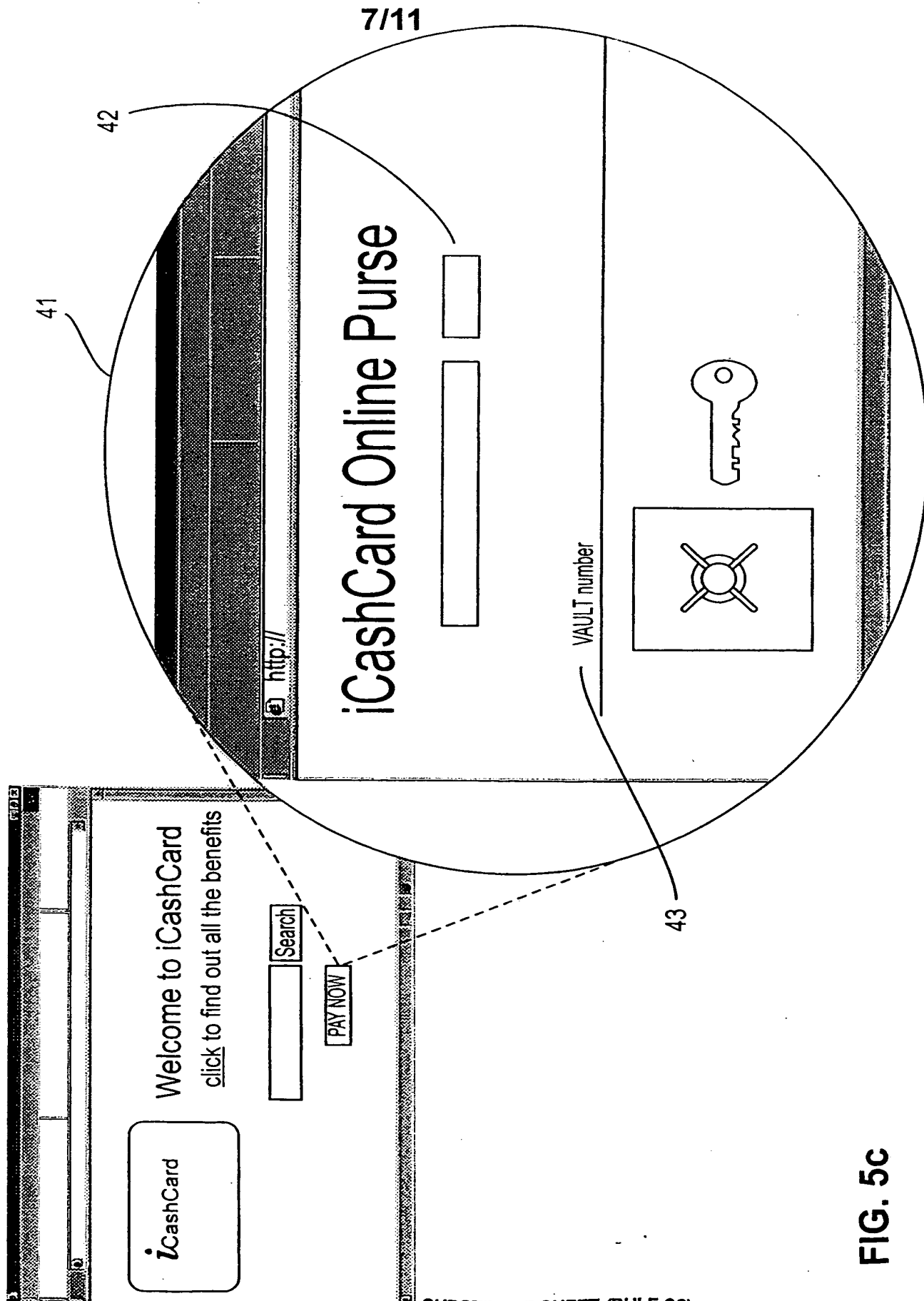


FIG. 5c

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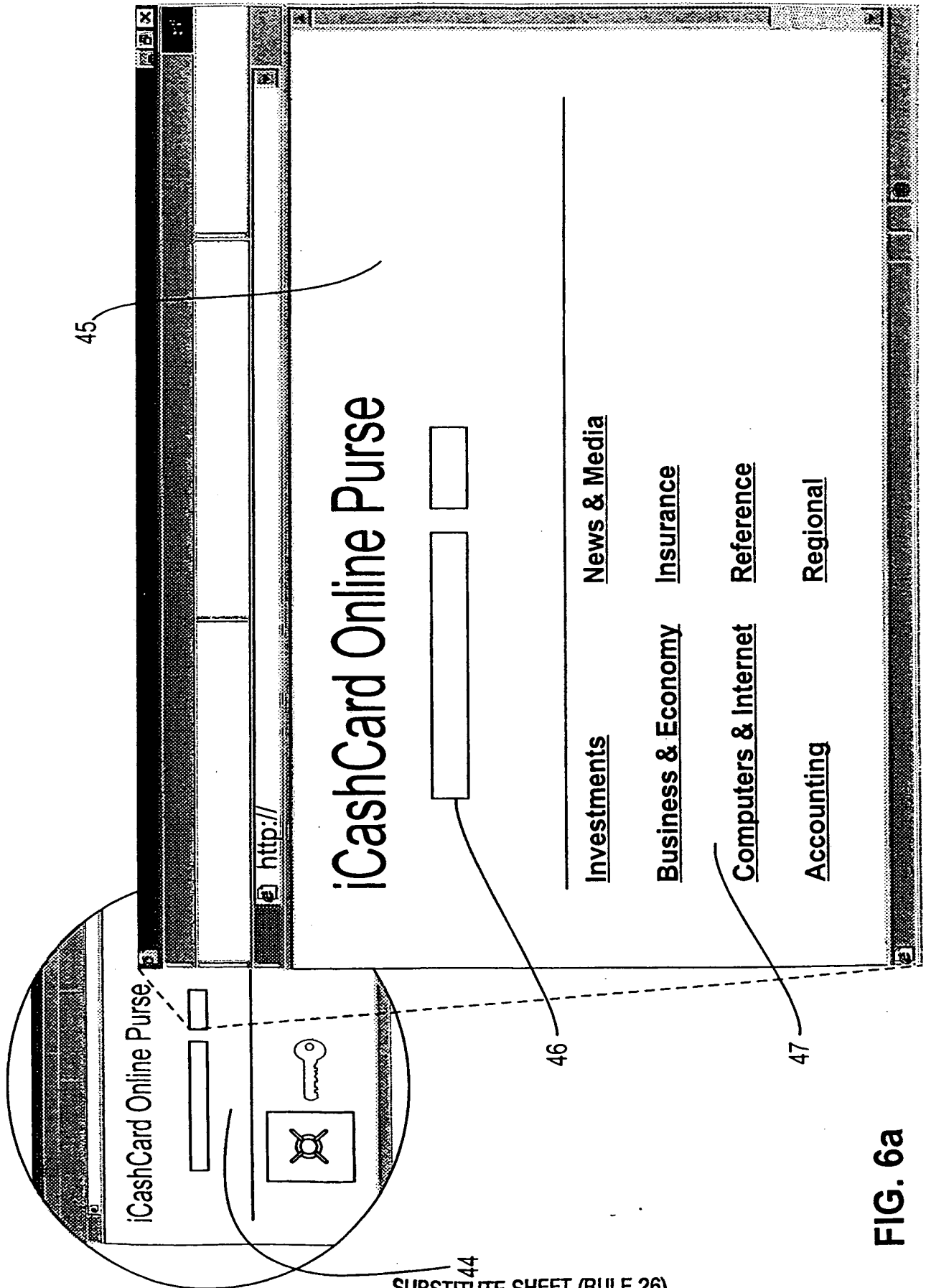


FIG. 6a

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iCashCard
Don't shop the Internet without it!

Charge Confirmation and Authorization

Merchant Name

Description of Purchase Item

Current Account Balance

Purchase Price

Other Charges

Total Charge

Shipping Address

48

49

iCashCard Online Purse

FIG. 6b

45

50

Online Register

Transaction Number	Date	Payee	Description	Payment/ Debit Amount	Deposit/ Credit Amount	Balance	Status

23

FIG. 6c

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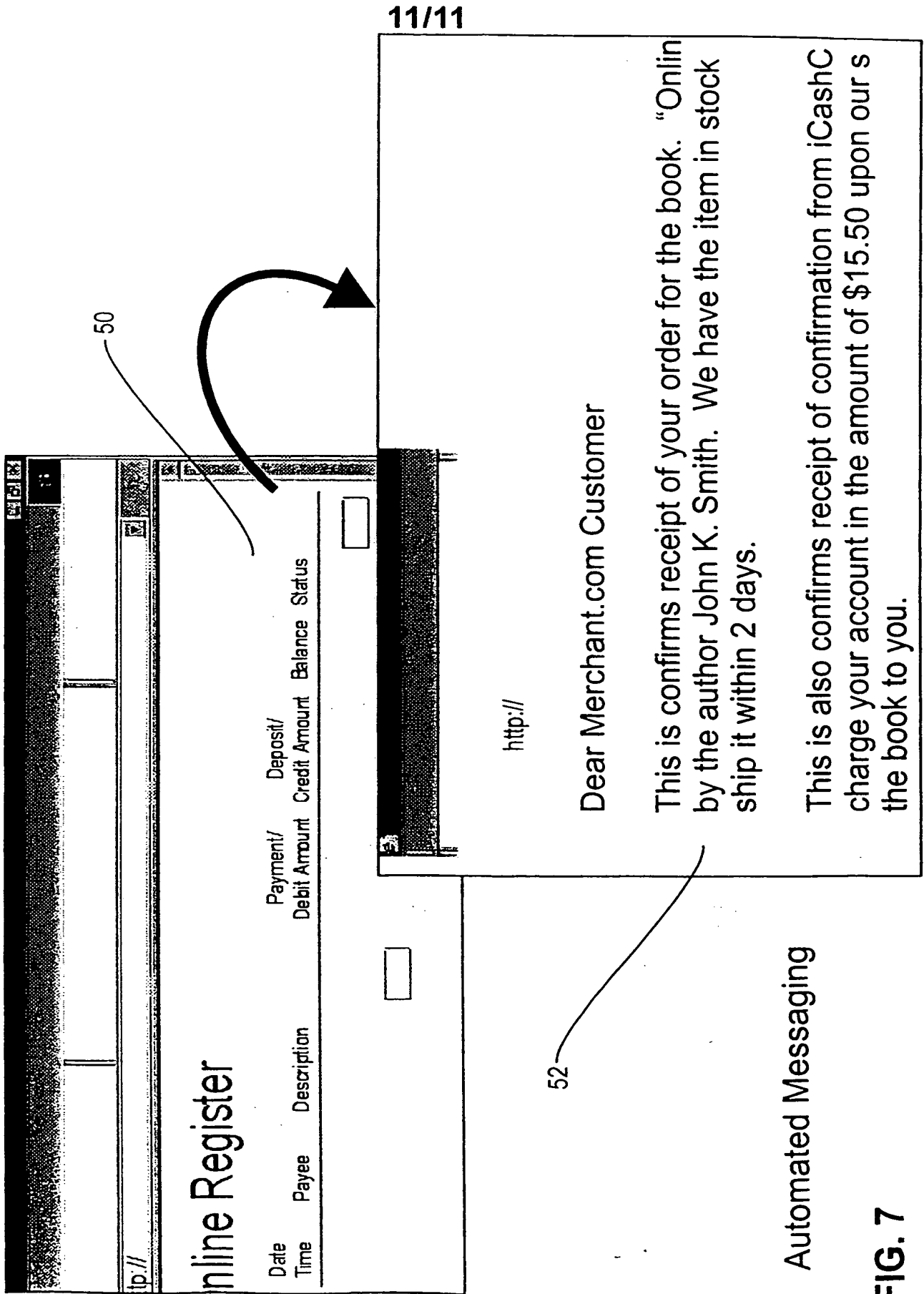


FIG. 7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/07420

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60
US CL : 705/42

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/42, 26, 27, 39, 40, 41, 44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Enot Service (USPATfiles, Derwent, EPO, JPO), DIALOG (financial and business databases), see attached.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,850,446 A (BERGER et al) 15 December 1998, see abstract.	1-59
A,P	US 5,943,423 A (MUFTIC) 24 August 1999, see abstract.	1-59
X	O'MAHONY et al. Electronic Payment Systems (Electronic cash payment systems). Artech House. Norwood MA. 1997. pp. 145-189, especially pp. 158-168.	1-5, 8, 15-24, 28-34, 37, 44-54, 58 and 59
A	UNKNOWN. Dialog File 20 (World Reporter), Number 4508208. Electronic Money for Internet-Based Transaction Introduced. Korea Times. 03 MARCH 1999. 2 pages.	1-59

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

A	document defining the general state of the art which is not considered to be of particular relevance	*T*	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
B	earlier document published on or after the international filing date	*X*	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
L	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Y*	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
O	document referring to an oral disclosure, use, exhibition or other means	*Δ*	document member of the same patent family
P	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

02 JULY 2000

Date of mailing of the international search report

04 AUG 2000

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Joni Hill

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/07420

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	LARGE, Jack. Direct purchasing on the Internet. Corporate Finance. March 1997. No. 148. pp. 38-41.	1-59

Form PCT/ISA/210 (continuation of second sheet) (July 1998) *